



# ECONOMIC PROFILE: SAN JOAQUIN VALLEY REGION





OCTOBER 2008



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#### **PREFACE**

The California Economic Strategy Panel (Panel) continuously examines changes in the state's economic base and industry sectors to develop a statewide vision and strategic initiatives to guide public policy decisions for economic growth and competitiveness (see www.labor.ca.gov/panel/). The fifteen-member Panel is comprised of eight appointees by the Governor, two appointees each by the President pro Tempore and the Speaker and one each by the Senate and Assembly Minority Floor Leaders. The Secretary of the California Labor & Workforce Development Agency serves as the Chair.

The Panel first identified California's economy as an economy of regions in 1996. At that time, the Panel also adopted a new way of looking at industry sectors and how they function and grow as industry clusters. These new ways of looking at the economy became the basis for the analytical work completed then, and have provided a foundation for the Panel's work since that time.

The California Regional Economies Project is currently the lead research mechanism for the Panel to identify economic policy issues. The project provides the state's economic and workforce development systems with data and information about changing regional economies and labor markets. The information provides a new resource in economic and workforce development planning and investment decisions and a bridge connecting economic and workforce policies and programs at the state and regional levels.

In order to understand the state's economy and the changes taking place within industry sectors and industry clusters, it is important to recognize the regional nature of the economy and to analyze the economic base by region. To do this, the statewide and nine regional economic base reports analyze the patterns of employment, business establishments, wages, population, unemployment rate and other key factors.

This report presents an in-depth analysis of the San Joaquin Valley Region from 2001 to 2006, with snapshots of employment changes in 2007 and early 2008; however, this report does not cover the most recent, dynamic changes taking place in the economy, due to lag time in data availability at the detailed level used in our analyses. The most current monthly trends for California are available from the Labor Market Information Division of the Employment Development Department, at <a href="https://www.labormarketinfo.edd.ca.gov/?pageid=1003">www.labormarketinfo.edd.ca.gov/?pageid=1003</a>.

This profile provides updates to the Profile released in 2007, highlighting significant changes and key industry sectors and clusters in each region. This is briefer than past profiles and uses a different format, in an effort to make the information easier to read and faster to digest. The 2008 Profile also adds a new cluster, Housing, as we track activity in residential construction and related industries.

The statewide and eight other regional economic base reports are also available at <a href="https://www.labor.ca.gov/panel/">www.labor.ca.gov/panel/</a>. Previous economic base reports examined the 1990-2002, 2001-2004 and 2001-2005 periods. The earlier reports were the first economic base reports for the regional economies as they are defined today. The Panel's initial work, from 1994-1996, resulted in identification of six regions and provided regional economic base analyses; however, those regions were significantly redefined by 1998 into nine regions, making comparisons to the early analyses impractical.

The source of the data used for these reports is the official employment and wage information reported by employers to the State. While a variety of other sources provide similar information, they may not capture the official numbers that employers report, or may not include input from all employers. This data source is the most comprehensive and accurate source of information direct from employers, and is therefore the best to use for public policy-making, planning and program administration.

The Panel has taken steps to institutionalize the analysis and preparation of these economic base reports within State government so that this analysis may be provided on a yearly basis. Also, steps have been taken to leverage the body of knowledge that now exists around the study of industry clusters, gained through the California Regional Economies Project.

First, a non-confidential version of the data series, the *California Regional Economies Employment Series*, has been made available online by the California Employment Development Department's Labor Market Information Division (LMID) so that regional organizations may access this data at the county level. Second, a step-by-step guide, the *Industry Clusters of Opportunity User Guide*, is available online so that regional organizations can conduct industry cluster studies and work with business and industry to test and apply the findings.

With this information, regional organizations may conduct their own economic base and industry cluster analyses down to the county level, and they may combine county data to create their own sub-regional study areas. Training workshops are being held to teach the methodology and processes outlined in the *Industry Clusters of Opportunity User Guide* to representatives from Local Workforce Investment Boards, economic development organizations, the Employment Training Panel, LMID, educational institutions and programs including Community Colleges and Regional Occupational Programs, and other local jurisdictions.

The statewide and regional economic profiles, the *Industry Clusters of Opportunity User Guide* and other studies are available on the Panel's website at

www.labor.ca.gov/panel/espcrep.htm.

The California Regional Economies Employment Series is available online at www.labormarketinfo.edd.ca.gov/?pageid=173. The California Regional Economies Project is sponsored by the California Labor & Workforce Development Agency, California Employment Development Department, California Workforce Investment Board and the California Community Colleges Chancellor's Office.

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#### ECONOMIC PROFILE

October 2008



## THE SAN JOAQUIN VALLEY REGION includes

eight counties, as defined by the California Economic Strategy Panel (Panel): Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare.

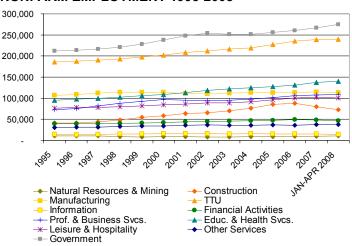
The San Joaquin Valley Region is the state's third largest region based on population and fourth largest based on employment, with 10.4% of its population and 8.6% of its jobs (2006). The region experienced population growth of 11.3% and job growth of 9.9% from 2001 to 2006, the fastest rates of growth of any region. Still, within the region's eight counties, the preliminary unemployment rate for August 2008 ranged from 8.9% in Madera County to 11.2% in Merced County.

From 2001 to 2006, while jobs grew by 9.9%, the region's Gross Domestic Product (GDP) grew by 78.0% and Per Capita Personal Income grew by 17.3%. Across all sectors, the greatest number and percentage of growth was reported in Construction, up 38.1% or 24,300 jobs. The next fastest growth was reported by Professional, Scientific & Technical Services, followed by Educational Services and Administrative & Waste Services. Of the twenty major sectors, only Management of Companies & Enterprises reported losses during this period. The impact of the housing downturn was not reflected in the employment data through 2006.

The Current Employment Statistics (CES) program data, which excludes Farm and Private Households employment data, shows growth in Nonfarm employment in 2007, and positive year-over change from April 2007 to April 2008.

Using the CES data, the following graph shows Nonfarm employment since 1995:

#### NONFARM EMPLOYMENT 1995-2008<sup>1</sup>



#### A SNAPSHOT OF 2007 & 2008

This snapshot uses employment estimates from the Current Employment Statistics (CES) program, which is the most current data available. The CES program is a different data source than that used for the rest of the report, and is available only at the super-sector level. We recognize that this does not capture the current capital and credit crisis that we are experiencing.

For the San Joaquin Valley Region, a look at recent preliminary data shows continued growth in 2007 and from April 2007 to April 2008.

Overall, Nonfarm employment grew by2.4% from 2006 to 2007. From 2001 to 2006, all but one super sector reported growth; only Other Services reported losses, down 29.1%. This changed from 2006 to 2007, with Construction, Information and Financial Activities all reporting losses. A comparison of April 2007 with April 2008 suggests that losses in these sectors have continued, with losses now also in Leisure & Hospitality.

Of particular interest, Manufacturing, Trade, Transportation & Utilities and Professional & Business Services all reported growth from 2001 through 2007, and from April 2007 to April 2008. These sectors include good-paying, export-oriented jobs – jobs that bring revenues into the region.

The following table summarizes private sector Nonfarm employment change from 2001 to 2007, and into early 2008. The employment shown here does not include employment for Agriculture or Private Households, as the CES data does not capture these industries.

SAN JOAQUIN VALLEY	2001- 2006*	2006- 2007	Apr07- Apr08
Total Nonfarm	9.5%	2.4%	0.9%
Natural Resources & Mining	7.3%	2.0%	7.0%
Construction	38.1%	-9.8%	-8.7%
Manufacturing	0.9%	2.3%	2.9%
Trade, Transportation, & Utilities	12.9%	2.6%	2.4%
Information	0.6%	-2.0%	-2.0%
Financial Activities	12.1%	-1.5%	-5.5%
Professional & Business Svcs	10.8%	1.6%	2.3%
Educational & Health Services	15.3%	7.5%	2.3%
Leisure & Hospitality	14.9%	2.3%	-0.8%
Other Services	-29.1%	22.5%	2.4%
Government	5.1%	2.7%	1.8%

<sup>\*</sup> The 2001 through 2006 data uses the California Regional Economies Employment Series (CREE) data source; this is generally the source of data for all employment analyses in this report, unless otherwise indicated.

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<sup>&</sup>lt;sup>1</sup> The January to April 2008 data represents a four-month average.

#### **IN RECENT YEARS 2001-2006**

The rest of this report covers the period from 2001 through 2006, providing a picture of what was happening prior to, and at the start of the recent housing downturn. The data source is the Quarterly Census of Employment and Wages (QCEW) program, which releases the final annualized data about ten months after the end of each calendar year. The 2006 data was the most current available at the time of this report.

The QCEW data is available at the most detailed industry level<sup>2</sup>, allowing an in-depth look at the industries and industry clusters during this time period. The CES data used for 2007 and 2008 was available at the super-sector level and excluded employment for the Farm and Private Households industries.

The following statistics are reported for the period of 2001 to 2006 in order to provide comparable facts for a more complete picture of the region during this period.

#### **BUSINESS**

Job Growth (2001-2006)	9.9%
Establishment Growth (2001-2006)	15.9%
GDP Growth <sup>3</sup> (2001-2006)	78.0%
Average Wage (2006, Private Industry)	\$ 31,747
Wage Growth (2001-2006)	21.0%
Firms with < 100 employees (2006)	98.1%
Firms with < 50 employees (2006)	95.7%
Self-employed, not incorporated (2006)	7.2%

#### WORKFORCE

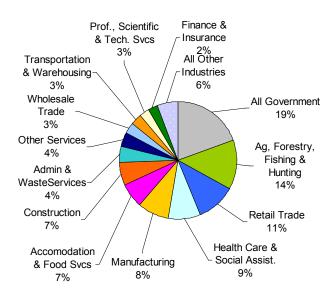
Unemployment Rate (2006)	7.9%
Population Growth (2001-2006)	11.3%
Per Capita Income (2006)	\$ 26,069
Bachelor's Degree or higher (2006)	
-Of population age 25 and older	10.7% to 19.0%
Families Living in Poverty (2006)	15.1%

#### **QUALITY OF PLACE**

Air Quality Index (2006 Median AQI <sup>4</sup> )	36 to 84
Average Commute Time (2006)	19.6 to 29.3 min.
Housing Opportunity Index <sup>5</sup> (2007)	9.7% to 21.6%

NOTE: Ranges provided where data are only available by county or Metropolitan Statistical Area and a regional value cannot be calculated.

#### **INDUSTRY COMPOSITION 2006**



#### **REGIONAL JOB GROWTH RANKING (2001-2006)**

1.	San Joaquin Valley Region	9.9%
2.	Greater Sacramento Region	9.4%
3.	Southern Border Region	7.7%
4.	Southern California Region	6.5%
5.	No. Sacramento Valley Region	6.4%
	California as-a-whole	6.1%
6.	Central Sierra Region	5.9%
7.	Central Coast Region	3.6%
8.	Northern California Region	1.3%
9.	Bay Area Region	-5.8%

## JOB GROWTH IN THE MAJOR INDUSTRY SECTORS

**2001-2006** (NAICS 2-DIGIT) (TEN LARGEST IN BOLD)

Agriculture, Forestry, Fishing & Hunting (NAICS 11)	1.1%
Mining (NAICS 21)	7.3%
Utilities (NAICS 22)	17.4%
Construction (NAICS 23)	38.1%
Manufacturing (NAICS 31-33)	0.9%
Wholesale Trade (NAICS 42)	18.5%
Retail Trade (NAICS 44-45)	11.4%
Transportation & Warehousing (NAICS 48-49)	11.8%
Information (NAICS 51)	0.6%
Finance & Insurance (NAICS 52)	13.0%
Real Estate & Rental & Leasing	10.5%
Prof., Scientific & Technical Services (NAICS 54)	31.2%
Mngmt of Companies & Enterprises (NAICS 55)	-41.2%
Administrative & Waste Services (NAICS 56)	20.2%
Educational Services (NAICS 61)	23.7%
Health Care & Social Assistance (NAICS 62)	14.7%
Arts, Entertainment & Recreation (NAICS 71)	12.9%
Accommodation & Food Services (NAICS 72)	15.2%
Other Services (except Public Admin) (NAICS 81)	17.4%
All Government <sup>6</sup>	5.1%

<sup>&</sup>lt;sup>6</sup> All Government represents Federal, State and Local Government, and includes a wide range of jobs, from firefighting, police, education and defense, to public services and elected officials.

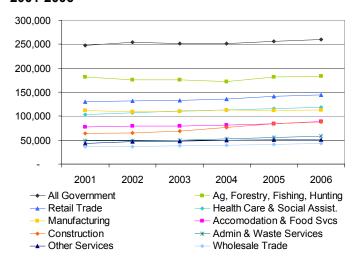
<sup>&</sup>lt;sup>2</sup> The North American Industry Classification System (NAICS), 6-digit level.

<sup>&</sup>lt;sup>3</sup> GDP = Gross Domestic Product; the data is available by MSA, which is used to approximate the regional GDP, where available.

<sup>&</sup>lt;sup>4</sup> An AQI value of 50 or lower is Good; 51-100 is Moderate; 101-150 is Unhealthy for Sensitive Groups; and 151 or higher is Unhealthy (includes unhealthy, very unhealthy, and hazardous).

<sup>&</sup>lt;sup>5</sup> 4<sup>th</sup> Quarter 2007, percentage of homes in the area that would be affordable to a family making the median income.

# JOB GROWTH FOR THE TEN LARGEST SECTORS 2001-2006



#### "TOP FIVE" SUB-SECTORS

#### **TOP FIVE LARGEST SUB-SECTORS (2006)**

Support Activities for Agriculture & Forestry (NAICS 115) Food Services & Drinking Places (NAICS 722) Crop Production (NAICS 111) Specialty Trade Contractors (NAICS 238) Administrative & Support Services (NAICS 561)

#### **TOP FIVE FASTEST GROWING SUB-SECTORS ('01-'06)**

(With at least 0.005% of total employment)

Other Information Services (NAICS 519)
Postal Service (NAICS 491)
Forestry & Logging (NAICS 113)
Beverage Manufacturing (NAICS312)
Petroleum & Coal Products Mfg (NAICS 324)

#### TOP FIVE COMPETITIVE ADVANTAGE (LQ\*) SUB-SECTORS (2006) (With at least 0.005% of total employment)

Animal Production (NAICS 112), 7.8 LQ Support Activities for Mining (NAICS 213), 6.8 LQ Support Activities for Ag & Forestry (NAICS 115), 6.8 LQ Oil & Gas Extraction (NAICS 211), 4.5 LQ Crop Production (NAICS 111), 4.2 LQ

## TOP FIVE SUB-SECTORS WITH HIGHEST AVERAGE

WAGE (2006) (With at least 0.005% of total employment)

Oil & Gas Extraction (NAICS 211)
Securities & Other Investments & Services (NAICS 523)
Utilities (NAICS 221)
Pipeline Transportation (NAICS 486)
Petroleum & Coal Products Mfg (NAICS 324)

The average annual wages range from \$70.3K to \$98.7K.

#### AT THE MOST DETAILED INDUSTRY LEVEL

(NAICS 6-DIGIT)

The following observations reflect what took place from 2001 to 2006 at the most detailed industry level, and may provide some insight into the economy during that period.

Change can take place quickly at this most detailed level; therefore, it is important not to base policy or program administration decisions solely only such information.

#### The ten largest industries based on employment size:

Farm Labor Contractors & Crew Leaders (NAICS 115115)
Limited-Service Restaurants (NAICS 722211)
General Medical & Surgical Hospitals (NAICS 622110)
Full-Service Restaurants (NAICS 722110)
Temporary Help Services (NAICS 561320)
Supermarkets & Other Grocery Stores (NAICS 445110)
Offices of Physicians (except Mental Health) (NAICS 621111)
Private Households (NAICS 814110)
Discount Department Stores (NAICS 452112)
Grape Vineyards (NAICS 111332)

# The ten fastest growing (with at least 0.005% of total employment):

Zoos & Botanical Gardens (NAICS 712130)
Sewage Treatment Facilities (NAICS 221320)
All Other Information Services (NAICS 519190)
Perishable Prepared Food Mfg (NAICS 311991)
Mfg Instruments & Products for Measuring, Displaying &
Controlling Industrial Process Variables (NAICS 334513)
Other Gambling Industries (NAICS 713290)
Financial Transactions Processing & Activities (NAICS 522320)
Turbine/Generator Set Units Mfg (NAICS 333611)
Strawberry Farming (NAICS 111333)
HMO Medical Centers (NAICS 621491)

#### The ten with the strongest competitive advantage:

Cotton Farming (NAICS 111920)
Turkey Production (NAICS 112330)
Phosphatic Fertilizer Mfg (NAICS 325312)
Poultry Processing (NAICS 311615)
Cotton Ginning (NAICS 115111)
Dairy Cattle & Milk Production (NAICS 112120)
Roasted Nuts & Peanut Butter Mfg (NAICS 311911)
Orange Groves (NAICS 111310)
Dry, Condensed & Evap. Dairy Product Mfg (NAICS 311514)
Cheese Mfg (NAICS 311513)

<sup>\*</sup> Location Quotient (LQ) greater than 1.0 means a higher concentration of these jobs in the region than found statewide.

# AT THE MOST DETAILED INDUSTRY LEVEL (Continued)

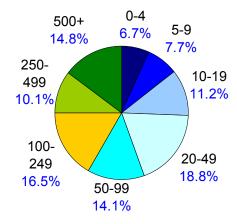
#### The ten highest paying industries:

Investment Banking & Securities (NAICS 523110), \$117.1K Offices of Other Holding Companies (NAICS 551112), \$102.2K Crude Petroleum & Nat. Gas Extraction (NAICS 211111), \$98.7K Fossil Fuel Electric Power Generation NAICS 221112), \$89.1K Petroleum Refineries (NAICS 324110), \$87.9K Securities Brokerage (NAICS 523120), \$86.1K Other Metal Valve & Pipe Fitting Mfg (NAICS 332919), \$85.1K Grain & Field Bean Wholesalers (NAICS 424510), \$83.1K Leather & Hide Tanning & Finishing (NAICS 316110), \$80.2K Natural Gas Distribution (NAICS 221210), \$77.7K

# EMPLOYMENT & BUSINESS GROWTH BY SIZE OF FIRM (Private Industry)

In 2006, firms with fewer than 100 employees made up 98.1% of all businesses in the region and provided 58.5% of all jobs in the region. Firms with 500 or more employees made up 0.2% of all businesses, and provided 14.8% of all jobs.

#### **DISTRIBUTION OF JOBS BY SIZE OF FIRM (2006)**



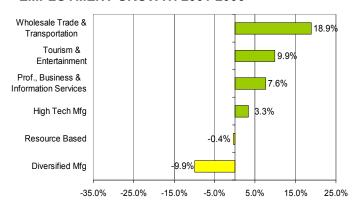
# BUSINESS GROWTH BY SIZE OF FIRM (2001-2006)

Number of Employees	Growth of Jobs	Growth of Firms
0-4	14.4%	19.2%
5-9	7.9%	7.0%
10-19	7.8%	7.7%
20-49	9.8%	9.5%
50-99	6.8%	7.6%
100-249	10.5%	11.1%
250-499	9.2%	7.0%
500-999	18.5%	13.4%
1,000+	0.3%	-2.1%

#### THE TRADITIONAL ECONOMIC BASE

The economic base is traditionally considered to be export-oriented industries in the study area - industries that sell a large portion of their goods or services to people and businesses in markets outside of the area. The Panel's expanded definition of the economic base includes other industries that are also important to the region. Information follows on those industries and industry clusters.

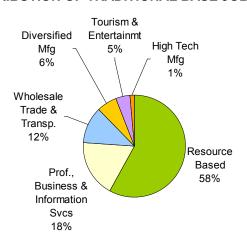
#### **EMPLOYMENT GROWTH 2001-2006**



In 2006, the region's traditional economic base provided 28.2% of all jobs in the region. Overall, the traditional base industries added over 10,100 jobs from 2001 to 2006, up 2.8%. Four of the six economic base sectors reported growth, led by Wholesale Trade & Transportation, up almost 7,000 jobs or 18.9%. Within this sector, Merchant Wholesalers of Nondurable Goods added the most jobs, up 2,500 jobs. The other base sectors reporting growth were Professional, Business & Information Services, up 4,800 jobs or 7.6%; Tourism & Entertainment, up 1,600 jobs or 9.9%; and, High Tech Manufacturing, up almost 200 jobs or 3.3%.

Only Diversified Manufacturing and Resource Based industries reported losses. The greatest number and percentage of job loss was reported by Diversified Manufacturing, down almost 2,600 jobs or 9.9%.

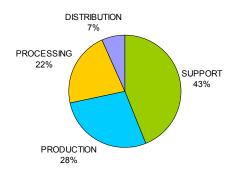
#### **DISTRIBUTION OF TRADITIONAL BASE JOBS (2006)**



# KEY INDUSTRY SECTORS AND CLUSTERS IN THE EXPANDED ECONOMIC BASE

#### THE FOOD CHAIN

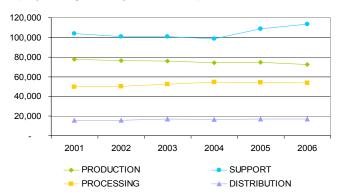
Agriculture is the largest private industry in the San Joaquin Valley Region. The Food Chain cluster includes industries involved in the production and delivery of agricultural products & services. These industries are grouped into four components; Production, Support, Processing and Distribution. The Food Chain cluster provided 19.5% of the region's jobs in 2006, or over 260,300 jobs. Most of the jobs within the Food Chain cluster were in Support and Production, providing 43% and 28% of the cluster's jobs, respectively.



From 2001 to 2006, the Food Chain cluster experienced job growth of 3.9%, up almost 9,900 jobs. Three of the four components reported growth; Support reported the greatest number of jobs added, up over 9,400 jobs (or 9.0%), most of which were added in Support Activities for Crop Production. Distribution reported the greatest percentage of growth, up 9.8% (about 1,500 jobs).

Only Production reported losses, down 5,200 jobs, led by losses in All Other Misc. Crop Farming and Fruit & Tree Nut Farming. These losses were partially offset by growth in Cattle Ranching & Farming (incl. Dairy) and Vegetable & Melon Farming (1,400 jobs).

#### Employment growth by cluster component:



The San Joaquin Valley Region had a much higher concentration of Food Chain jobs (4.0 LQ) than found at the statewide level. Within the cluster, Support had the highest concentration (5.4 LQ), followed by Production (5.1 LQ), Processing (3.2 LQ) and Distribution (1.4 LQ).

#### **MANUFACTURING**

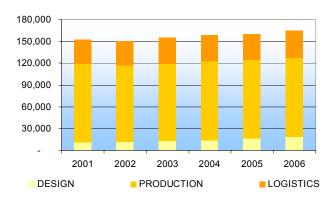
In 2006, the Manufacturing sector provided 8.4% of the region's jobs. The sector reported overall job growth of 0.9% from 2001 to 2006, up 1,000 jobs. About this same time, the region's manufacturing GDP grew by 31.8%. Preliminary data for 2007 suggests continued job growth from 2006 to 2007 (up 2.3%), and the year-over change for April (2007 to 2008) also shows a gain.

At the most detailed industry classification level (the 6-digit NAICS level), the ten fastest growing manufacturing industries included Perishable Prepared Food Manufacturing (Mfg); Instruments and Related Products Mfg for Measuring, Displaying, and Controlling Industrial Process Variables; Turbine & Turbine Generator Set Units Mfg; Paint & Coating Mfg; Ice Mfg; Engineered Wood Member (except Truss) Mfg; Gasket, Packing & Sealing Device Mfg; Custom Roll Forming; Hand & Edge Tool Mfg; and, Iron & Steel Mills.

The largest industries (at the 6-digit NAICS level) included Fruit & Vegetable Canning; Poultry Processing; Wineries; Cheese Mfg; Roasted Nuts & Peanut Butter Mfg; Dried & Dehydrated Food Mfg; Frozen Fruit, Juice & Vegetable Mfg; Animal (except Poultry) Slaughtering; Fluid Milk Mfg; and, Radio & Television Broadcasting & Wireless Communications Equipment Mfg.

Looking at the Manufacturing Value Chain industry cluster, all three components, Design, Production and Logistics, reported job growth from 2001 to 2006. Design added almost 7,400 jobs (68.1%), led by growth in Architectural, Engineering & Related Services; Production added 1,300 jobs (1.2%), led by growth in Other Food Manufacturing; and, Logistics added 4,200 jobs (12.7%), led by growth in Warehousing & Storage.

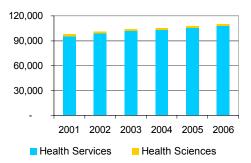
Manufacturing Value Chain employment 2001-2006:



Some manufacturing jobs will not be reflected in this data, as manufacturing firms are using Employment Services, including temporary employment services, for hiring some of their workers. Those workers would be reported as part of the Employment Services industries' employment. This practice is also used by other industries.

#### **HEALTH SCIENCES & SERVICES**

The Health Sciences & Services industry cluster provided 8.2% of the region's jobs in 2006, or over 110,000 jobs; 97.7% of these jobs were in Health Services. From 2001 to 2006, the cluster grew by 12.4%, or 12,100 jobs. The region had a slightly lower concentration of Health Sciences & Services jobs (0.9 LQ) than found statewide.



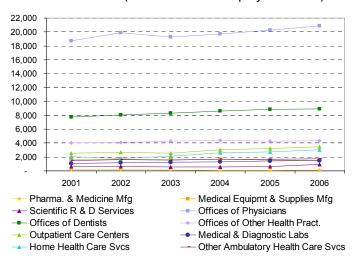
#### **Health Sciences**

Health Sciences experienced job growth of almost 2% from 2001 to 2006, adding about 50 jobs. Within Health Sciences, only Scientific Research & Development reported growth during this period, up 52.8%%, while Pharmaceutical & Medicine Manufacturing and Medical Equipment & Supplies Manufacturing experienced losses, down 38.7% and 12.9%, respectively.

#### **Health Services**

Health Services, which includes the health care industries, experienced job growth of 12.7%, up almost 12,100 jobs from 2001 to 2006. Within Health Services, Home Health Care Services reported the fastest growth, up 48.7%, and General Medical & Surgical Hospitals added the most jobs, up 5,900 jobs. At the same time, Residential Mental Health & Substance Abuse Facilities experienced the greatest number of jobs lost, down 1,700 jobs, and Psychiatric & Substance Abuse Hospitals reported the greatest percentage of losses, down 81.3%.

The following graph shows employment change for the three Health Sciences industries and the top seven Health Services industries (based on 2006 employment size).



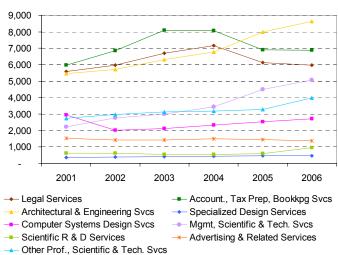
# PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES

The Professional, Scientific & Technical Services sector provided 2.7% of the region's jobs in 2006, or about 36,000 jobs. This sector is important for supporting entrepreneurship and innovation, and is therefore included in this analysis, despite being smaller than several other sectors in the region.

The Professional, Scientific & Technical Services sector reported overall job growth of 23.1% from 2001 to 2006, adding almost 8,600 jobs. Within the sector, Architectural, Engineering & Related Services reported the greatest number of jobs added, up almost 3,200 jobs (led by Engineering Services). The greatest percentage of job growth was reported by Management, Scientific, & Technical Consulting Services, up 129.0%.

The other growing industry groups included Other Professional, Scientific & Technical Services (up 1,200 jobs); Accounting, Tax Preparation, Bookkeeping & Payroll Services (up 900 jobs); Legal Services (up 400 jobs); Scientific Research & Development Services (up over 300 jobs); and, Specialized Design Services (up 100 jobs).

The following graph shows employment change from 2001 to 2006 for all industry groups in the sector.



During this same period, two industry groups reported job losses. Computer Systems Design & Related Services lost the most jobs, dropping about 250 jobs, followed by Advertising & Related Services (down 200 jobs).

Within the sector, at the most detailed industry classification level, the largest industries were Engineering Services, with almost 5,700 jobs in 2006, followed by Offices of Lawyers (5,200 jobs), Offices of Certified Public Accountants (3,000 jobs), and Other Scientific & Technical Consulting Services (over 2,400 jobs).

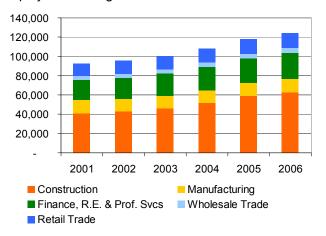
#### **HOUSING**

For the purpose of this analysis, the Housing cluster (Housing) includes industries involved in residential construction; manufacturing of construction materials; real estate financing, sales, leasing and management<sup>7</sup>; and, related wholesale and retail trade. As defined, this cluster provided 9.3% of the region's jobs in 2006, with almost 124,700 jobs.

Overall, Housing experienced job growth of 34.6% from 2001 to 2006. Within the cluster, Construction grew by 52.7%, or over 21,800 jobs; Manufacturing reported losses of 1.1% (down 150 jobs); Finance, Real Estate & Professional Services reported 32.5% growth (up over 6,500 jobs); Wholesale Trade grew by 18.3% (up almost 800 jobs); and, Retail Trade grew by 24.1% (up about 3,100 jobs).

Year-over Change	'01- '02	'02- '03	'03- '04	'04- '05	'05- '06
Housing-related Construction	3.7%	7.5%	12.2%	14.2%	7.0%
Housing-related Manufacturing	-4.4%	-4.9%	4.7%	3.4%	0.5%
Finance, RE & Prof. Svcs	7.1%	9.0%	3.3%	3.8%	5.9%
Housing-related Wholesale Trade	-2.9%	1.2%	3.6%	6.8%	8.8%
Housing-related Retail Trade	3.1%	5.2%	4.8%	6.7%	2.3%
Housing Cluster	2.8%	5.5%	7.8%	9.2%	5.5%

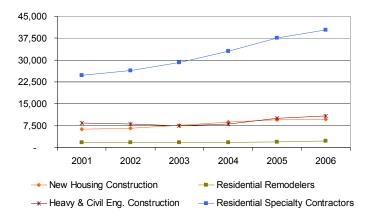
#### Employment change from 2001 to 2006:



#### Construction

Within Construction, New Housing Construction grew by 54.7% from 2001 to 2006, up almost 3,500 jobs; Residential Remodelers grew by 22.7%; Housing-related Heavy & Civil Engineering Construction grew by 28.5%; and, Residential Specialty Trade Contractors reported growth of 62.8%.

Housing Construction employment 2001 to 2006:



#### **Manufacturing of Construction Materials**

Housing-related Manufacturing industries reported overall job losses of 1.1% from 2001 to 2006, or fewer than 200 jobs. Losses were led by Ornamental & Architectural Metal Work Manufacturing and All Other Plastics Product Manufacturing (down over 500 jobs each). Several industries reported 100% losses, including Copper Wire Drawing and Enameled Iron & Metal Sanitary Ware Manufacturing (Mfq).

At the same time, half of the ten largest Housing-related Manufacturing industries reported growth, including the largest of these industries, Ready-Mix Concrete Mfg, up 49.5%, or over 600 jobs. The following table shows employment change from 2001 to 2006 for the ten largest Housing-related Manufacturing industries:

NAICS	Industry	Change '01-'06
327320	Ready-Mix Concrete Mfg	49.5%
326199	All Other Plastics Product Mfg	-32.8%
326122	Plastics Pipe and Pipe Fitting Mfg	-0.6%
332311	Prefabricated Metal Building and Component Mfg	-21.3%
321918	Other Millwork (including Flooring)	-9.5%
321214	Truss Mfg	33.8%
321911	Wood Window and Door Mfg	3.2%
327390	Other Concrete Product Mfg	25.1%
333415	Air-Conditioning & Warm Air Heating Equipment & Commercial & Ind. Mfg	-6.3%
327310	Cement Mfg	7.4%

# Finance & Insurance, Real Estate and Professional Services

Together, the Finance & Insurance, Real Estate and Professional Services industries related to Housing reported job growth of 32.5% from 2001 to 2006, with growth strongest from 2002 to 2003.

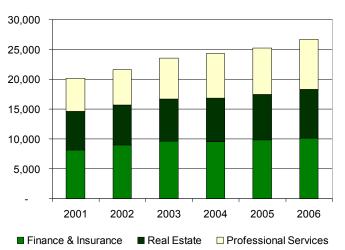
	'01-'02	'02-'03	'03-'04	'04-'05	'05-'06
Year-over					
Change	7.1%	9.0%	3.3%	3.8%	5.9%

<sup>&</sup>lt;sup>7</sup>A detailed definition by NAICS code is provided online at www.labor.ca.gov/panel in the document, "About the 2008 Economic Updates."

#### **HOUSING**

(Continued)

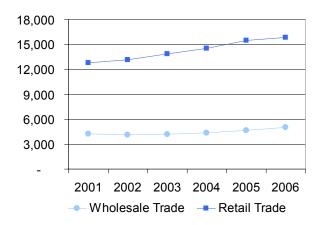
Employment growth from 2001 to 2006:



Within these sectors, the largest industry is Engineering Services, with about 5,700 jobs in 2006. From 2001 to 2006, Engineering Services added the most jobs, up 2,500 jobs, and Secondary Market Financing reported the fastest growth, up 266.7%. At the same time, Credit Card Issuing and All Other Nondepository Credit Intermediation reported the most jobs lost, down about 70 jobs each.

#### Wholesale & Retail Trade

Overall, the Housing-related Wholesale Trade industries experienced job growth of 18.3% from 2001 to 2006, up almost 800 jobs. The largest industry is Plumbing & Heating Equipment & Supplies Wholesalers, with almost 1,100 jobs. This industry added the most jobs from 2001 to 2006, up almost 400 jobs. Other Construction Material Wholesalers reported the fastest growth, up 77.5%.



Overall, the Housing-related Retail Trade industries experienced job growth of 24.1% from 2001 to 2006, up almost 3,100 jobs. The largest industry is Home Centers, with over 7,400 jobs. This industry added the most jobs from 2001 to 2006, up almost 3,300 jobs or 77.8%, which also represents the fastest growth.

#### **ENERGY**

Energy production and usage, specifically focusing on environmentally responsible green technologies and processes, are important issues facing policy-makers, energy producers, distributors and consumers. A number of studies and discussions about the green economy were underway at the time of this report, including a study commissioned by the Economic Strategy Panel: therefore, this report does not attempt to define and analyze the green economy. Instead, readers interested in this subject are encouraged to read the study commissioned by the Panel, Clean Technology and the Green Economy: Growing Products, Services, Businesses and Jobs in California's Value Network, available online at www.labor.ca.gov/panel/espcrep.htm. The March 2008 draft was available at the time of this report.

"Nationally and globally, attentions are focusing on rising energy costs, questions of national energy security, worry over environmental and related societal threats as well as fears of economic slow-down. These seemingly countervailing crises might suggest that a choice must be made between doing what is good for the environment OR doing what is good for the economy.

California's green economy demonstrates that this is not the case. California's green economy is not about a handful of new industries struggling in under-developed markets. Instead, it is about the potential of new technologies combined with innovative public policy and strategic investment to stimulate the growth of new markets for environmentally sound products and services while also reinvigorating slowing markets through the widening application of new technologies across the entire economy."

"As green products and practices permeate the reaches of the economy, the discussion is no longer about the emergence of a new industry; instead it is about the transformation of the entire economy. This transformation is toward an economy that makes more efficient and sustainable use of our limited natural resources."

– Clean Technology and the Green Economy: Growing Products, Services, Businesses and Jobs in California's Value Network, March 2008

Readers may also want to explore the web page, Understanding the "Green" Economy, at www.labormarketinfo.edd.ca.gov/?pageid=1032, created by the Labor Market Information Division of the Employment Development Department. This web page provides links to a broad array of studies and activities regarding the green economy, conducted by public and private entities.

#### **SOURCES**

#### **BUSINESS**

Employment, Firm & Wage Data, Private Sector California Regional Economies Employment Series (CREE)\*

Current Employment Statistics (CES) Employment Data, Government Sector 2007 & 2008 Employment Data Current Employment Statistics (CES) Size of Firm Data

EDD/Labor Market Information Division (LMID), Size of Firm Data

US Census/America's Community Survey (ACS) Self-employed (non-incorporated business)

US Bureau of Economic Analysis (BEA)

#### **WORKFORCE**

**Unemployment Rate** California Employment Development Department (EDD)

Population Growth US Bureau of Economic Analysis (BEA)

**Educational Attainment** US Census/ACS Median Household Income US Census/ACS US Census/ACS Families Living in Poverty

**QUALITY OF PLACE** 

Gross Domestic Product (GDP)

Air Quality Index (AQI) Environmental Protection Agency, AirData

Average Commute Time US Census/ACS

Housing Opportunity Index National Assoc. of Home Builders- Wells Fargo Housing Opportunity Index

#### **METHODOLOGY**

In order to understand the state's economy and the changes taking place within industry sectors and industry clusters, it is important to recognize the regional nature of the economy and to analyze the economic base by region. To do this, the statewide and nine regional economic profiles analyze the patterns of employment, business establishments, wages, population, unemployment rate and other key factors. The statewide and nine regional economic profiles are available at www.labor.ca.gov/panel in the document. Also online, the document, The 2008 California Economic Profiles - Introduction & Methodology, provides additional information about the methodology and documentation of the NAICS definitions for the industry clusters and traditional economic base industries.

#### **DEFINITION OF AN INDUSTRY CLUSTER**

An industry sector is a group of firms that are doing the same type of work, making the same type of products, or providing the same types of services. Examples include manufacturing, construction, retail trade and health care. An industry cluster is a group of interdependent industry sectors characterized by competing firms and buyer-supplier relationships, as well as shared labor pools and other specialized infrastructure. They are also geographically concentrated. When identifying "industry clusters of opportunity," the Panel adds additional considerations that focus on employment opportunities for regional residents.

#### ABOUT THE PANEL

The California Economic Strategy Panel was established in 1993 to develop an overall economic vision and strategy to guide public policy. The Panel engages in an objective and collaborative planning process that examines economic regions, industry clusters, and cross-regional economic issues. The California Regional Economies Project is currently the lead mechanism for these efforts.

The California Regional Economies Project offers new insight into the dynamics of California's economy. The regional perspective provides a better understand how the economy is changing, where the changes are concentrated, and what catalysts and conditions are causing those changes. It also shows how change in one region affects other regions and the state as a whole.

For more information and publications, go to the Panel's website at www.labor.ca.gov/panel/.





<sup>\*</sup> The CREE data used for the analyses included confidential data; however, the results presented in the economic profiles do not disclose confidential data.